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SPECIALTIES AND MEDICINE *

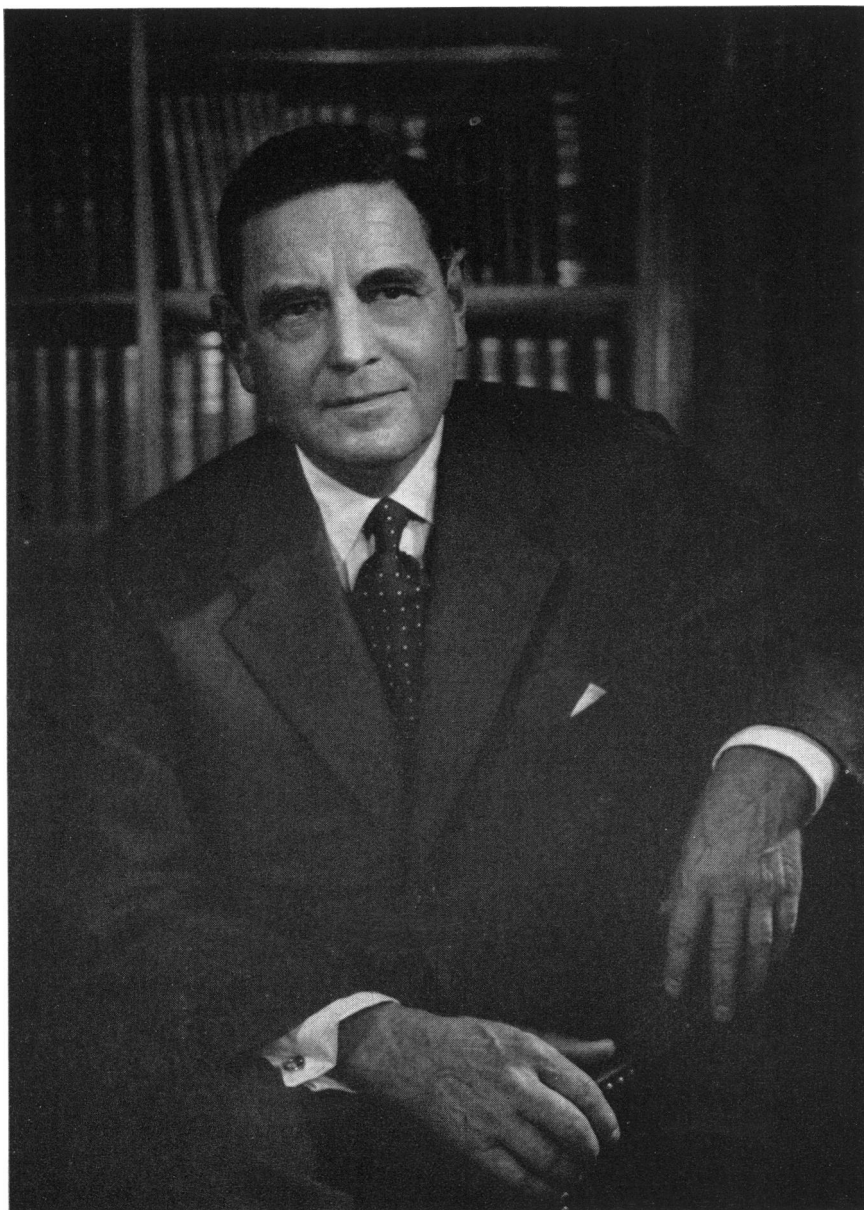
Inaugural Address

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ON an occasion such as this, the formalities tend to follow a pattern. The retiring veteran, comfortably relaxed by the feeling that he has completed a job well done, puts down his gavel with a sigh of relief; the new recruit takes it up with an enthusiasm born of ignorance, yet keenly aware of the challenge to be met. The Academy exerts a very special and vital influence on the medical life of New York; indeed, it may justly be said that the impact of its activities and deliberations has become national and, through the Bulletin, global. The actual work, upon which rests a reputation for leadership, is done by an able, full-time executive staff and by a number of committees composed of Fellows. The Director is the hub about which the organization revolves and, happily, his guiding force is sustained over a period of years. It has been our good fortune, for the past decade, to have the wise direction of Dr. Howard R. Craig. The President, on the other hand, is a transient. As a member of the Board of Trustees and of the Council, he acts in an advisory capacity and aids in outlining policy and procedure. In

* Delivered at the Annual Meeting of The New York Academy of Medicine, January 3, 1957.



ROBERT L. LEVY, M.D.

accepting this office, I do so with pride in having been chosen and with an earnest desire to carry forward the aims and ideals of many eminent predecessors, at the high level set by them.

At this point I shall deviate from custom in avoiding detailed comment on Academy affairs, of which I still have much to learn. Instead, I propose to reflect briefly on the place of special spheres of activity in medicine. To one who long has wandered in the field of cardiology, this relationship has been of particular interest and concern.

The evolution of specialization was inevitable, largely due to the influence of three factors: first, the development of special skills and techniques; second, the forward surge of knowledge; and third, particularly in recent years, the application of many adjacent sciences to the solution of medical problems. Significant contributions have been made possible with the help of chemistry, physics, engineering, mathematics, statistics and electronics; already the exciting uses of atomic energy have afforded promising glimpses into the future. But how can one person possibly be expected to familiarize himself with all, or even several, of these highly developed disciplines and at the same time become an accomplished clinician? To do so would indeed call for the talents of a superman.

Almost fifty years ago, when Harvey Cushing was actively engaged in establishing neurological surgery on a firm foundation, he wrote as follows: "The specialty is the measure of the man. So long as there are individuals capable, after a general training, of working along novel lines and with the imagination for research which leads to contributions, so long will the field of their endeavors justify its being regarded as special; and it is almost impossible to make definite advances in one direction without permitting other work to go by the board."* A broad, general experience should be part of the education of every physician; it is essential for one who, later in his career, plans to confine his work to a special field.

The core of a specialty is original investigation. In my opinion, regardless of certification by a specialty board, no physician should be content to consider himself a specialist unless he has carried through at least one research problem in his chosen field and has published the results. These need not be of major importance; the approach may be

* Cushing, H. The special field of neurological surgery: five years later, *Bull. Johns Hopkins Hosp.* 21:325-39, 1910.

clinical or by way of one of the basic sciences, or a combination of both. But the experimental method encourages logical thinking and this, together with the judicial weighing of evidence, serves to separate the seed from the husk; in other words, it develops sound scientific critique. Such an attitude leads to valid conclusions, at the bedside as well as in the laboratory.

The desire for scientific advance must not let the whole be obscured by the number and complexity of its parts. There is the danger of concentrating too intently on an area whose boundaries are unduly circumscribed. On this point, Vannevar Bush has commented incisively: "Every scientist feels acutely today the effects of overspecialization. The volume of publication is so vast that it is impossible to keep abreast of it, even as the field of interest is narrowed. Whole new sciences and branches of engineering appear, with their specialized societies and journals. Intensely progressive gatherings of research workers develop their own jargons, unintelligible except to the initiated, heightening the barriers which separate their work from the main stream of progress."*

How aptly these remarks apply, for example, to the field of cardiovascular diseases is at once apparent to those who struggle to maintain a working acquaintance with current activities dealing with the circulation. The mass of material to be sifted induces a feeling of hopelessness, for much of it is good and merits attention. Even though the basic causes of rheumatic fever, hypertension and atherosclerosis remain obscure, the twentieth century has witnessed giant forward strides. One instance is freshly in mind. In 1929 a young German surgeon, Forssmann, first introduced a catheter into the heart through an arm vein, using himself as the subject. Subsequently, in this city, Cournand and Richards demonstrated how cardiac catheterization could be employed to unravel the intricacies of cardiopulmonary physiology, both normal and pathologic. Last month these three pioneers shared the Nobel Prize in Medicine. The results of their work have made it possible to define more clearly the indications for treatment, medical as well as surgical, of various disorders of the heart and lungs. Such fruitful studies afford a potent stimulus to further effort.

The Academy sponsors a number of specialties which are represented by its twelve sections and by various independent organizations, such as The New York Heart Association. Section meetings are often

* Bush, V. Science in medicine and related fields, *Med. Ann. District of Columbia*. 22:1-6; 58, 1953.

combined and, at the Stated Meetings and under the auspices of the endowed lectureships, an attempt is made to integrate different medical interests. The same concept is followed in arranging the Graduate Fortnight. Because there are many clinics and conferences held at the medical schools and hospitals of the city, which offer postgraduate instruction of a high order, the attendance at some of the Academy sessions has been discouragingly small. Less frequent gatherings, more authoritative speakers and well-chosen topics are lures which attract an eager audience. Lively and informal discussion adds zest to the occasion; random questions from the floor, sent to the platform on torn scraps of paper, rarely evoke a profitable response. In short, there must be fostered an atmosphere of genuine intellectual interest spiced with a practical flavor.

The objects of this association are clearly stated in Article I of the Constitution, a document which only recently has occupied my attention and which, I venture to assume, has not been read by most of you. These are "the advancement of the science and art of medicine, the maintenance of a public medical library and the promotion of public health and medical education." It is the responsibility and duty of all of us to strive for the accomplishment of these purposes.